

REMARKS

Claims 1 - 18 are pending in the application. Claims 1 - 18 have been rejected. Claims 1, 7, 13 and 18 have been amended.

Claims 1, 2, 5 - 8, 11 - 14, 17 and 18 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Dyer et al., U.S. Patent No. 6,349,340 B1 (Dyer). Claims 3, 4, 9, 10, 15 and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Dyer in view of Kamentsky et al., U.S. Publication No. 2002/0065929 A1 (Kamentsky). These rejections are respectfully traversed.

The present invention, as set forth by independent claim 1, relates to a method of communicating in a remote services system which includes communicating a forward channel communication using a forward channel communication path, communicating a back-channel communication using a back-channel communication path wherein the back-channel communication path is established only after a forward channel communication path is established, and using the back-channel communication path to multicast a message to a group of remote service components.

The present invention, as set forth by independent claim 7, relates to a method of communicating in a remote services system which includes assigning a plurality of remote service components within the remote services system with a respective plurality of unique remote services identifiers, communicating a forward channel communication using a forward channel communication path, communicating a back-channel communication using a back-channel communication path, and using the back-channel communication path to multicast a message to a group of remote service components based upon unique remote services identifiers corresponding to components of the group of remote service components.

The present invention, as set forth by independent claim 13, relates to a remote services system which includes a plurality of remote service components. The plurality of remote service components include a respective plurality of unique remote services identifiers, a forward channel communication path coupled to the plurality of remote service components, a back-channel communications path coupled to the plurality of remote service components wherein the

back-channel communications path allows a multicast of a message to a group of components based upon unique remote services identifiers corresponding to components of the group of remote service components.

Dyer discloses a method for receiving requested multicast data over a plurality of multicast communications channels. The method includes the steps of determining a source communications channel for receiving requested multicast data; enabling the source communications channel; receiving the requested multicast data through the source communications channel; and, forwarding the requested multicast data to requesting processes. In the preferred embodiment, the source communications channel is overloaded with multicast data from a plurality of multicast data sources.

More specifically, the portion of Dyer to which the examiner refers which the examiner maintains discloses communicating via a forward channel sets forth:

... receiving from a plurality of processes in a client node requests for multicast data; ... (Dyer, Col. 3, lines 38-39)

as well as:

In the preferred embodiment, the source communications channel is overloaded with multicast data from a plurality of multicast data sources. (Dyer Col. 4, lines 13-15)

as well as:

Each of the requests for data and requested data can be communicated between the processes 28 and the LAN 4 through channels 22 leading to and from the interface circuitry 10. (Dyer Col. 5, lines 54-57).

The portion of Dyer to which the examiner refers which the examiner maintains discloses communicating a back-channel communication sets forth:

... determining a source communications channel for receiving the requested multicast data ... (Dyer Col. 2, lines 33-35)

as well as:

In accordance with the present invention, the data distribution manager 24 can enable and disable each channel 22 in the interface circuitry 10 using a corresponding link layer programming interface 32 to the interface circuitry 10. (Dyer Col. 6, lines 26-29).

The portion of Dyer to which the examiner refers which the examiner maintains discloses using the back-channel communication path to multicast a message sets forth:

The method can include receiving from a process in a client node a request for multicast data; identifying a source for the requested multicast data; determining a source communications channel for receiving the requested multicast data; enabling the source communications channel; receiving the multicast data through the source communications channel; and, forwarding the multicast data to the requesting client node process. (Dyer Col. 2, lines 31-38).

However, nowhere in any of the cited portions of Dyer, nor in anywhere else in Dyer is there any disclosure of a remote services system as claimed, much less such a system which includes a back-channel communication path being established only after a forward communication path is established, or using the back-channel communication path to multicast a message to a group of remote services components, as required by independent claim 1 and substantially as required by independent claims 7 and 13.

Additionally, the portion of Dyer to which the examiner refers which the examiner maintains discloses assigning a plurality of components within a remote services system with a plurality of unique remote services identifiers sets forth:

For instance, the determining step can include hashing the identified source of the requested multicast data; and, identifying as the source communications channel the hashed source of the requested multicast data. (Dyer Col. 2, lines 44-47).

as well as:

... receiving from a plurality of processes in a client node requests for multicast data; identifying a multicast data source for each request; ... (Dyer Col. 3, lines 38-40)

as well as:

Rather, the configuration file can include a static mapping of any identifier corresponding to a source of the requested multicast data, for example a proprietary network address or a network adapter address corresponding to the network source of the multicast data. (Dyer Col. 7, lines 28-30)

However, nowhere in any of the cited portions of Dyer, nor in anywhere else in Dyer is there any disclosure of a remote services system as claimed, much less such a system which includes a plurality of remote services components, where the plurality of remote services components include a respective plurality of unique remote services identifiers as required by independent claims 7 and 13.

Kamentsky does not compensate for these deficiencies in Dyer.

More specifically, Kamentsky discloses a multimedia network involves sending an initial schedule message prior to broadcast or multicast of a content file. The content file could be a promotion or other file that is to be sent to a large number of end node devices, such as television set top boxes. The schedule message contains at least a bulk transfer end time for the content file so that the end node devices are aware of when the later bulk data transmission of the content file should be completed. The schedule message may contain other parameters such as promotion identification, message start time, duration, frequency, multicast address and port number. The bulk message containing the promotion is then sent using an efficient bulk transfer messaging technique, such as a multicast Universal Data Protocol (UDP) message which does not require acknowledgment of individual packets or individual addresses of the end node devices to be maintained. At the expected end of the transmission time, a determination is made as to whether or not the expect bulk message has been received. If not, the network device reports a message failure to the original scheduling process, which in turn retransmits the promotion package to the previously failing network device via a reliable transport protocol, such as TCP.

Accordingly, Dyer and Kamentsky, taken alone or in combination, do not teach or suggest a method of communicating in a *remote services system* which includes communicating a forward channel communication using a forward channel communication path, communicating a back-channel communication using a back-channel communication path wherein the back-channel communication path is established *only* after a forward channel communication path is established, and using the back-channel communication path to multicast a message to *a group of remote service components*, all as required by claim 1. Accordingly, claim 1 is allowable over Dyer and Kamentsky. Claims 2 - 6 depend from claim 1 and are allowable for at least this reason.

Additionally, Dyer and Kamentsky, taken alone or in combination, do not teach or suggest a method of communicating in a *remote services system* which includes assigning a plurality of components within the *remote services system* with a respective plurality of *unique remote services identifiers*, communicating a forward channel communication using a forward channel communication path, communicating a back-channel communication using a back-channel communication path, and using the back-channel communication path to multicast a message to a group of components based upon *unique remote services identifiers* corresponding to components of the group of *remote service components*, all as required by claim 7. Accordingly, claim 7 is allowable over Dyer and Kamentsky. Claims 8 - 12 depend from claim 7 and are allowable for at least this reason.

Additionally, Dyer and Kamentsky, taken alone or in combination, do not teach or suggest a *remote services system* which includes a plurality of *remote service components*, much less one where the plurality of *remote service components* include a respective plurality of *unique remote services identifiers*, a forward channel communication path coupled to the plurality of *remote service components*, a back-channel communications path coupled to the plurality of *remote service components* wherein the back-channel communications path allows a multicast of a message to a group of *remote service components* based upon unique remote services identifiers corresponding to components of the group of *remote service components*, all as required by claim 13. Accordingly, claim 13 is allowable over Dyer and Kamentsky. Claims 14 - 18 depend from claim 13 and are allowable for at least this reason.